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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/591,878	09/06/2006	Tony Whittaker	WW/3-22356/A/PCT	4510

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EXAMINER	
HRUSKOCI, PETER A	

ART UNIT	PAPER NUMBER
1797	

NOTIFICATION DATE	DELIVERY MODE
11/03/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/591,878	WHITTAKER ET AL.	
	Examiner	Art Unit	
	/Peter A. Hruskoci/	1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 October 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Claims 1 and 27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 1 "the second flocculant particulates" lacks clear antecedent basis. In claim 27 "memi" is erroneous, and should be changed to – semi -.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-13, 15-17, and 20-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over McGrow et al. 5,213,693 in view of Stevenson 5,370,800 and Batty et al. 5,834,545. McGrow et al. (see col. 2 line 41 through col. 6 line 62) disclose a process of dewatering an aqueous suspension substantially as claimed. It is submitted that the cationic coagulant polymer utilized in McGrow et al. is considered patentably indistinguishable from the first flocculant. The claims differ from McGrow et al. by reciting the process includes producing a thickened suspension by the release of free water and the mixing of the second flocculant in the form of a particulate polymer with the thickened suspension. Stevenson discloses (see col. 1 line 68 through col. 3 line 50) that it is known in the art to mix waste water or a suspension with a first flocculating polymer, remove water from floccules in a rotary thickener, mix a second flocculating polymer with the floccules, and dewater the floccules in a filter press to produce pressed cake solids. Batty et al. disclose (see col. 4 line 47 through col. 7 line 20) that it is known in the art to mix a flocculant composition including polymer particles with a suspension,

to aid in dewatering the suspension. It would have been obvious to one skilled in the art to modify the process of McGrow et al. by utilizing the recited thickening and particulate polymer in view of the teachings of Stevenson and Batty et al. respectively, to aid in flocculating and dewatering the suspension. The specific particle diameter and second flocculants utilized, would have been an obvious matter of process optimization to one skilled in the art, depending on the specific sludge treated and results desired, absent a sufficient showing of unexpected results. With regard to claims 15-17, it is submitted that Batty et al. as applied above, appears to teach the use of the recited coating or matrix of silicone or wax. With regard to claim 27, it is submitted that the thickener of Stevenson appears to be capable of producing the recited sludge paste.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over McGrow et al. 5,213,693 in view of Stevenson 5,370,800 and Batty et al. 5,834,545 as above, and further in view of Sorensen et al. 5,846,433. The claim differs from the references as applied above by reciting the first flocculant comprises particles having a specific diameter. Sorensen et al. disclose (see col. 7 line 3 through col. 8 line 17) that it is known in the art to utilize a flocculant polymer particles having the recited diameter, to aid in dewatering a suspension. It would have been obvious to one skilled in the art to modify the references as applied above by utilizing the recited particles view of the teachings of Sorensen et al., to aid in flocculating and dewatering the suspension. The specific particle diameter utilized, would have been an obvious matter of process optimization to one skilled in the art, depending on the specific sludge treated and results desired, absent a sufficient showing of unexpected results.

Claim 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over McGrow et al. 5,213,693 in view of Stevenson 5,370,800 and Batty et al. 5,834,545 as above, and further in view of Ghafoor et al. 6,001,920. The claims differ from the references as applied above by reciting the second flocculant is introduced into the suspension in the form of slurry in a specific liquid. Ghafoor et al. disclose (see col. 1 line 16 through col. 6 line 36) that it is known in the art to utilize polyethylene glycol to aid in stabilizing a polymer coagulant utilized in flocculating sludge suspensions. It would have been obvious to one skilled in the art to modify the references as applied above, by utilizing the recited slurry in view of the teachings of Ghafoor et al., to aid in flocculating and dewatering the suspension.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-11, 18, and 19-27 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 3, 4, and 6-14 of copending Application No. 10/591,776 in view of Stevenson 5,370,800. The claims differ from the claims of the copending application by reciting the process includes producing a thickened suspension by the release of free water. Stevenson discloses (see col. 1 line 68 through col. 3 line 50) that it is known in the art to mix waste water or a suspension with a first flocculating polymer, remove water from floccules in a rotary thickener, mix a second flocculating polymer with the floccules, and dewater the floccules in a filter press to produce pressed cake solids. It would have been obvious to one skilled in the art to modify the claims of the copending application by producing the recited thickened suspension in view of the teachings of Stevenson, to aid in dewatering the suspension.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Applicants argue none of the cited references together or separately suggest the steps of thickening the suspension by the release of free water, and mixing the thickened suspension with flocculant particles distributed throughout the thickened suspension. It is submitted that the combination of McGrow, Stevenson, and Batty et al. provide this suggestion. Stevenson discloses that it is known in the art to mix waste water or a suspension with a first flocculating polymer, remove water from floccules in a rotary thickener, mix a second flocculating polymer with the floccules, and dewater the floccules in a filter press to produce pressed cake solids. Both McGrow and Batty et al. disclose that it is known in the art to mix a flocculant composition including polymer particles with a suspension, to aid in dewatering the suspension. It would have been obvious to one skilled in the art having the teachings of McGrow, Stevenson, and Batty et al. before him, to modify the process of McGrow et al. by utilizing the recited thickening and particulate polymer in view of the teachings of Stevenson and Batty et al. respectively, to aid in flocculating and dewatering the suspension.

The Whittaker Declaration has been carefully considered but fails to overcome the above rejection. It is submitted that the specific test conditions utilized to produce the results discussed in the Declaration and shown in the Examples are not commensurate with the scope of the instant claims. It is noted that the Examples included dewatering of a mixed primary/activated sludge with specific cationic polymer flocculants and dry polymer particle sizes, a specific furrowing technique, and a compression dewatering stage.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to /Peter A. Hruskoci/ whose telephone number is (571) 272-1160. The examiner can normally be reached on Monday through Friday from 8:00AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Peter A. Hruskoci/
Primary Examiner
Art Unit 1797

10/29/09